EVOLUTION OF BANGLADESH'S **FOREST POLICY: REFLECTIONS ON THE** PAST, CURRENT STATUS, AND FUTURE DIRECTIONS

Presentation Made at the Bangladesh Environment Network Bi-monthly Webinar

April 26, 2025

Sayeed R. Mehmood, PhD

Associate Professor, School of Environment and Natural Resources

> The Ohio State University

OUTLINE

Standard Street Land

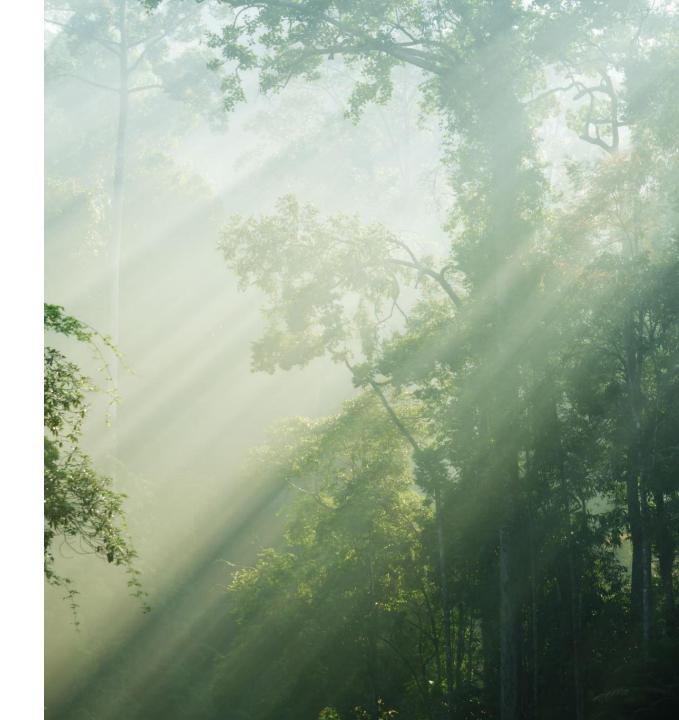
A brief timeline of the evolution of forest management and policy in Bangladesh.

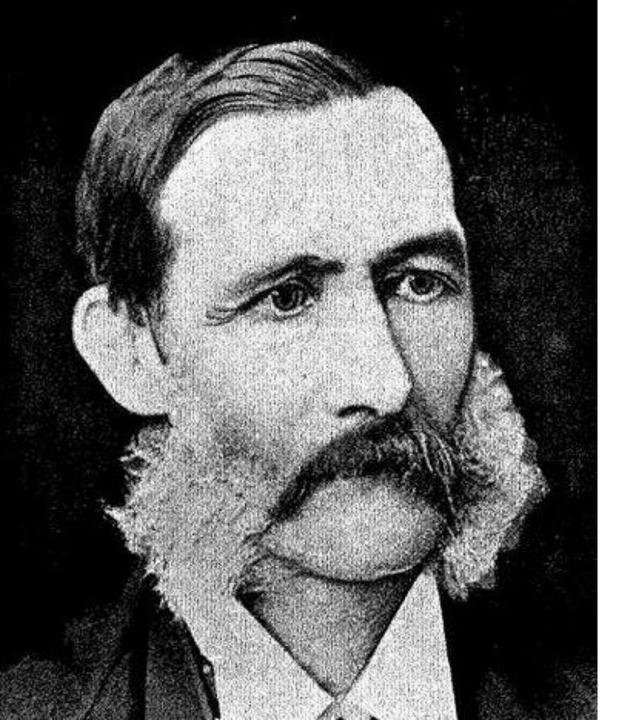
A closer look at couple of themes emerging from the timeline.

Discuss major constraints and future directions.

INTRODUCTION

- Evolution of forestry as a science.
- The story of forestry in Bangladesh is one of many influences and twists and turns.
- Unfortunately, for the most part, it has not been a happy story.





FORESTRY IN THE COLONIAL PERIOD

- Construction of the railway network required a lot of timber, about 450 sleepers per km.
- Forests were already depleted due to earlier abuse, there were lot of worries about future availability.
- In 1856, Dietrich Brandis, a German Botanist and forester, was appointed Superintendent of Forests in Burma, he later became the Inspector General of Forests from 1864 to 1883.
- Brandis is widely regarded as the founder of scientific forestry in India

COLONIAL FORESTRY, CONTD.

- In 1840, the British colonial administration Crown Land Ordinance, which vested all forests, wastelands, unoccupied and uncultivated lands to the crown.
- The Imperial Forest Department was established in 1864.
- In 1865, the Indian Forest Act asserted British state monopoly over forests, giving them control over all wastelands, which included all forests.
- This law was amended twice, first in 1878 and then in 1927.
- The 1927 Indian Forest Act forms the basic structure of the current governing forest policy in Bangladesh.

POST COLONIAL ERA

Departure of the British colonial power and partition of the Indian subcontinent.

Possibly best described as a pseudo-colonial era.

Independence and the 70s forests generally took a back seat due to other pressing needs.

Also defined by political chaos.

THE 1980'S











Widespread removal of trees that started in the previous decade continued heavily. This resulted in a deforestation crisis and an abundance of barren/denuded land.

This period is also defined by a significant amount of grants and loans from donor nations and international organizations such as the United Nations (UNDP, FAO), the World Bank, among others. Significant emphasis was placed on bringing the barren lands and hills under some kind of vegetation as quickly as possible. This led to the planting of fast-growing species.

THE 1990'S

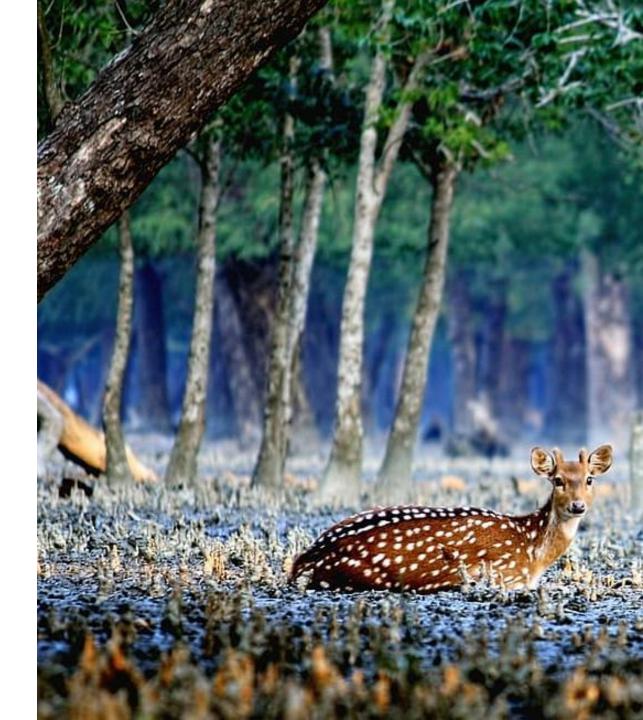
Global efforts in sustainable development influenced government policies in all sectors. Influence on the forestry sector sustainable forest management became somewhat of a priority, at least in theory.

Negative effects of sustainable economic development efforts land use conflicts caused further destruction of forests; Chakaria Sunderban for example.

As part of sustainable forest management, significant emphasis was placed on community-based forestry.

YEAR 2000 AND BEYOND

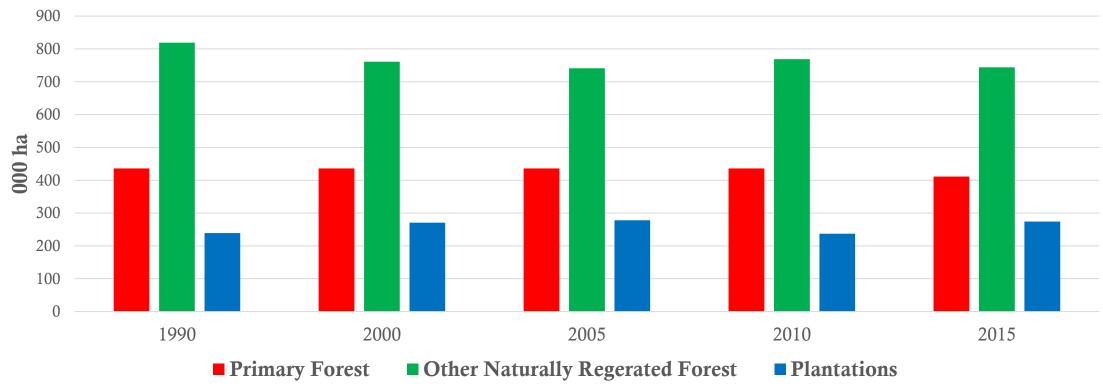
- Global concerns about the effects of climate change put focus on Bangladesh as a nation in the frontline.
- Wide recognition of forest's role in climate change mitigation (carbon sequestration, REDD+).
- Significant emphasis was also placed on ecosystem services; some consideration of payment for ecosystem services.
- Some consideration of governance decentralization with perhaps some limited success.
- Forest loss in this era is characterized by encroachment, land grabs, and land transfers.



CLOSER LOOK: DEFORESTATION

- Forest loss has been a fact of life in present day Bangladesh since the British colonial period.
- It has changed over the years both in intensity (1970s and 1980s), and type (illegal logging, land grab, encroachment, official transfers).

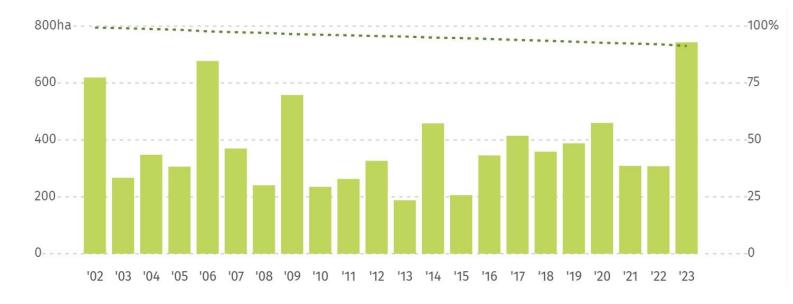




Bangladesh Forest Types, 1990-2015 (FAO, 2015)

PRIMARY FOREST LOSS, 2002-2023 Source: Global forest watch

From 2002 to 2023, Bangladesh lost 8.39 kha of humid primary forest, making up 3.5% of its total tree cover loss in the same time period. Total area of humid primary forest in Bangladesh decreased by 8.7% in this time period.

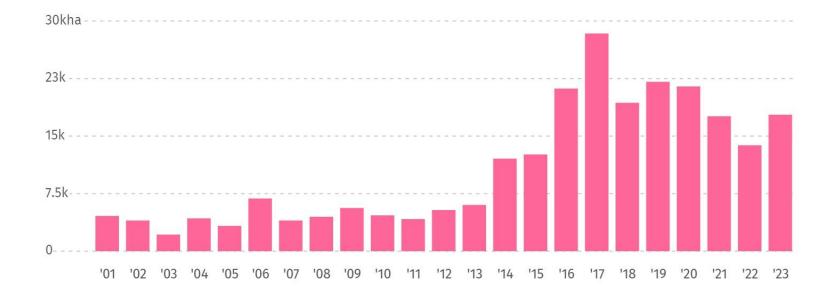


Area of tree cover loss within 2001 primary forest extent

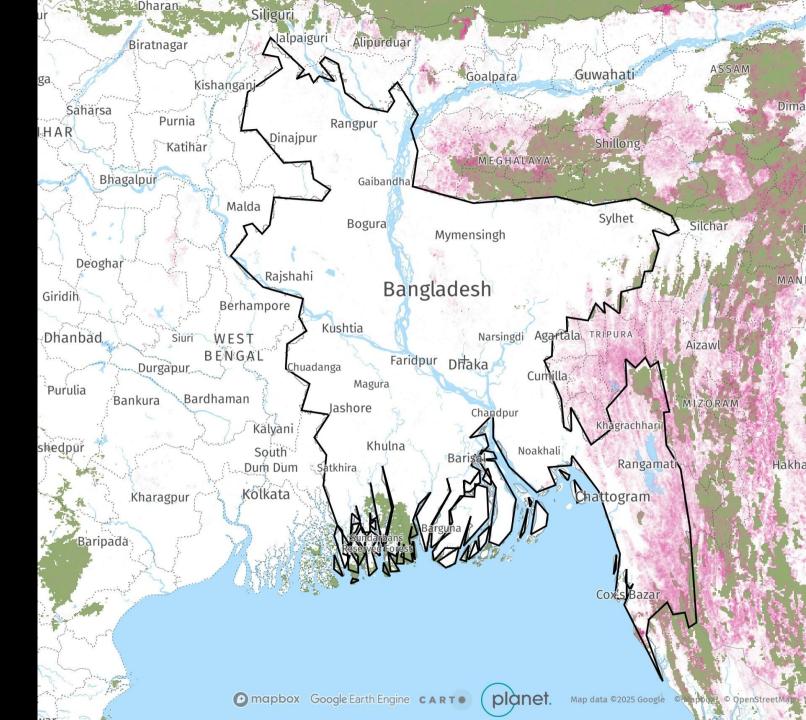
···· Percent of 2001 primary forest area extent remaining

TREE COVER LOSS, 2001-2023 SOURCE: GLOBAL FOREST WATCH

From **2001** to **2023**, **Bangladesh** lost **246** kha of tree cover, equivalent to a **13%** decrease in tree cover since **2000**, and **133** Mt of CO₂e emissions.

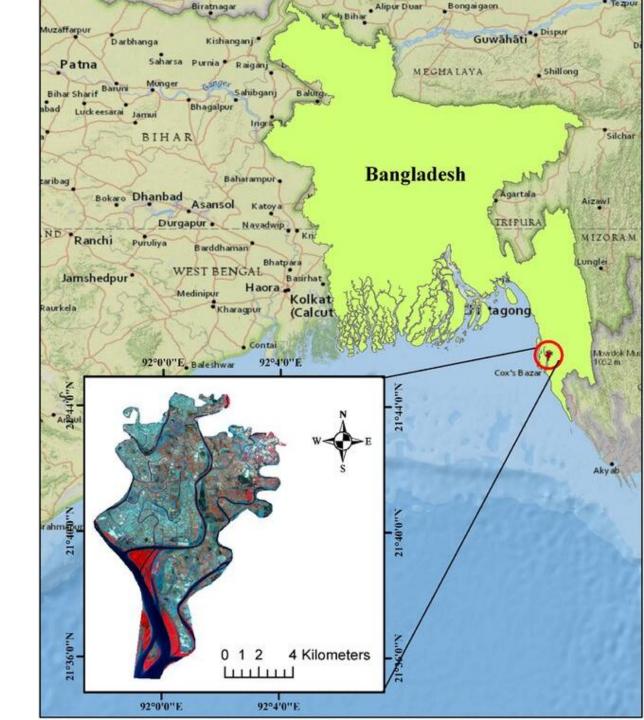


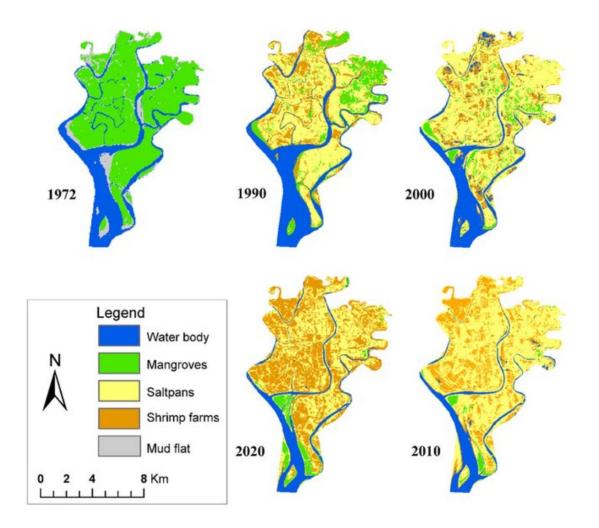
FOREST LOSS SOURCE: GLOBAL FOREST WATCH



CHAKARIA SUNDERBAN

- A classic example of how government policies can work against its own sustainability goals.
- Situated in the low-lying saline swamp at the mouth of the Matamuhuri delta, Chakaria Sunderban is (was) a block of natural mangrove forest on the Cox's Bazar coast.
- Conversion for shrimp farming began in the late 1970s, but then rapidly accelerated following funding by the World Bank and UNDP (\$26.5 million).





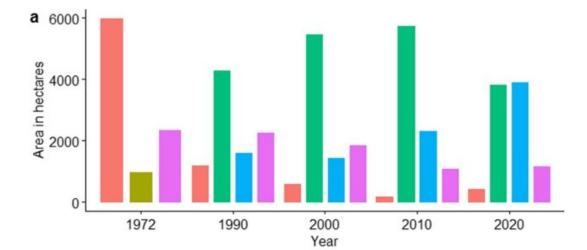
Figure

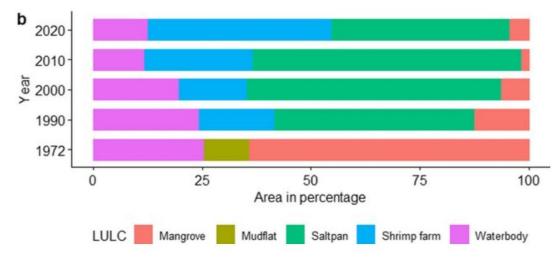
Caption

Changes of the land use land cover (LULC) of the Chakaria Sundarbans from 1972 to 2020

Content available from Environmental Science and Pollution Research This content is subject to copyright. <u>Terms and</u> <u>conditions</u> apply.

Source: Hasan et al., 2024





Figure

Caption

LULC distribution of the Chakaria Sundarbans from 1972 to 2020 showing the area in hectares (a) and area in percentage (b)

Content available from Environmental Science and Pollution Research This content is subject to copyright. <u>Terms and</u> <u>conditions</u> apply.

Source: Hasan et al., 2024

CLOSER LOOK: COMMUNITY-BASED FORESTRY

From early periods of Bangladesh's history, donor nations and international NGOs have been recommending decentralization of forest governance toward participatory management.

Participatory decision making and adaptive management has deep roots in the literature, Ostrom's (1990) seminal work solidified the theory.

Participatory management leads to better decision making, efficient management of resources, and a wide array of ecological, economic, and social benefits (Jashimuddin and Inoue, 2012).



MAJOR CONSTRAINTS: GOVERNANCE

Governance—a perennial issue in Bangladesh

Lack of government-wide coordination

Conflicting decision making

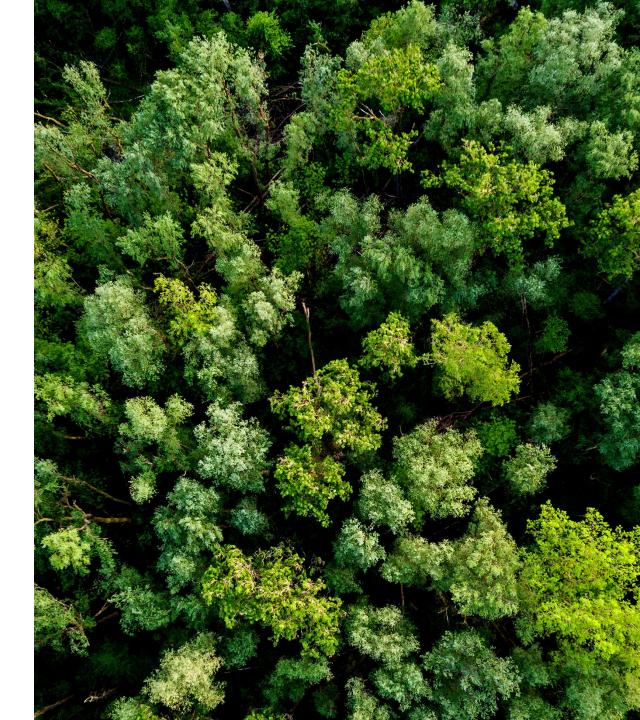
Relative power of the ministry within the government

Inability to continue with policies to a fruitful end

Autocratic decision making

MAJOR CONSTRAINTS: INEFFECTIVE FOREST MANAGEMENT GOALS

- Apparently unsure about forest management goals.
- Preservation or conservation?
- Policies seem somewhat dishonest about forest products and economic benefits.



MAJOR CONSTRAINTS: CORRUPTION

Another perennial issue in Bangladesh.

Since independence, it has been a reality in both upper echelons of the government and the forest administration.

Leads to inefficiencies in management.

SUCCESS STORIES

- It has not been all doom and gloom, there are a few success stories as well.
- Coastal afforestation—impressive gains.
- Social and community forestry—perhaps a partial success, but a success none the less.
- Wildlife—limited success in charismatic megafauna.



WHERE DO WE GO FROM HERE?

- With the current interim government in place, Bangladesh has an extremely narrow window for "real" reform in forest management.
- The key is to leave a structure of wholistic forest management that takes into account ecological, social, and economic aspects. Otherwise, it will be a recipe for failure.
- The structure should be strong enough so it cannot be easily discarded by subsequent government.



FUTURE TRAJECTORY

Coastal afforestation—an excellent tool against the effects of climate change.

Revive REDD+ strategies, be an active partner in climate talks, ensure a stake in the climate funds.

Community forestry—a winning solution to alleviating poverty and forest sustainability.

Wildlife protection—focus should be on all wildlife, not just charismatic ones.

Make good use of the talent in the Forest Department.

Build a society-wide coalition of researchers, Forest Department employees, and environmental activists. The road is difficult enough, fighting amongst yourselves will only make it less achievable.

THANK YOU!





Sayeed R. Mehmood, PhD

Associate Professor Natural Resource Economics

School of Environment and Natural Resources

469C Kottman Hall 2021 Coffey Road Columbus, OH 43210

Phone: (614) 688-2211 Email: <u>Mehmood.9@osu.edu</u>